



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS P.O. Box 1450 Alexandra, Viginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/825,664	04/03/2001	David R. Hembree	MI22-1680/US	4481	
21567 7:	590 06/06/2003				
WELLS ST. JOHN ROBERTS GREGORY & MATKIN P.S. 601 W. FIRST AVENUE SUITE 1300			EXAMINER		
			NGUYEN, VINH P		
SPOKANE, WA 99201-3828			ART UNIT	PAPER NUMBER	
			2829		
			DATE MAILED: 06/06/2003	DATE MAILED: 06/06/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

<u> </u>		Application No.	Applicant(s)			
Office Action Summary		09/825,664	HEMBREE, DAVID R.			
		Examiner	Art Unit			
		VINH P NGUYEN	2829			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
Period for Reply						
THE N - Exten after S - If the - If NO - Failur - Any re	DRTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. sions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, apply received by the Office later than three months after the mailing d patent term adjustment. See 37 CFR 1.704(b).	el6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).			
1) 🖂	Responsive to communication(s) filed on 13 M	farch 2003 .				
2a)□	·	s action is non-final.				
3)□	, _		osecution as to the ments is			
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
· _	on of Claims					
4)⊠ Claim(s) <u>14-17 and 53-80</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>14-17 and 53-80</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
	on Papers	_				
9) ☐ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>1</u> 8	5) Notice of Informal I	(PTO-413) Paper No(s) Patent Application (PTO-152)			
I.S. Patent and Ti	ademark Office					

Application/Control Number: 09/825,664

Art Unit: 2829

Page 2

1. Claims 68 and 71 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 68, it is unclear what "an electronic device wafer processing apparatus" represents. Is it shown in any of drawings? It appears that this term does not exist in claim 14.

In claim 71, it appears that the limitation of "using the intermediate member to fabricate a plurality of discrete integrated circuits of a plurality of respective dies..." is inaccurate. It appears that this intermediate member could not use for such purpose.

2. Claims 69-72,74-78 and 80 are rejected under 35 U.S.C 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It appears that the original specification does not have support for the limitations of claims 69-72,74-78 and 80.

It is noted that intermediate member is configured to support the wafer and to electrically connect the electrical coupling of the wafer with the electrical coupling of the chuck but not for processing within the wafer processing apparatus to form a plurality of discrete integrated circuits of a plurality of respective dies.

3. Claims 14-17,53-68 are rejected under 3 5 U. S C. 103(a)as being unpatentable over Smith et al (pat # 5,475.317) in view of Hagge et al (Pat # 3,710,251).

Application/Control Number: 09/825,664

Art Unit: 2829

As to claims 14-15,17,54-55,58,60-62,67-68, Smith discloses a singulated bare die tester having a workpiece holder or a chuck (4,12) for receiving an electronic die (2) and for supporting an electronic die (2), electrical coupling/wires (12a) for electrically coupling the electrical coupling (2a) of the electronic device die (2) and communicated signals between the workpiece and the workpiece holder (12). It is noted that the workpiece (2) of Smith is a singulated die and this die is a part of the wafer. However, Hagge et al teache that it would have been well known for one of ordinary skill in the art of semiconductor to consider that the apparatus for testing chip or wafer is interchangeable (see the abstract on line 1 and column 2,line 13-15). Therefore, it would have been obvious for one of ordinary skill in the art to use the device of Smith to test the wafer or chip as taught by Hagge et al since the both of these devices have the same characteristics and they are interchangeable.

Page 3

As to claims 16,59 and 66, it is noted that the electrical interconnect of Smith does not comprise pogo pin. It would have been well known for one of ordinary skill in the art to consider that pogo pin would have been a known probe for conducting electrical signal. Therefore, it would have been well known to use "pogo pin" in the device of Smith so that the pin could reach to different surface level of the test pads of the die (2) without damaging the pads.

As to claims 53,57 and 64, the interconnect member (4,6) are made of ceramic, therefore this material is considered as substantially non-conductive material.

As to claims 56 and 63, it appears that an outwardly exposed surface of the electrical coupling (2a) of the die/wafer (2) is substantially coplanar with the surface of the die/wafer (2).

As to claim 65, Smith discloses a burn-in board configured to receive signal. It would have been well-known that this board is equivalent to the data gathering device since it serve the same purpose as the one in the instant application.

It is also noted that the preamble is not given the effect of a limitation unless it breathes life and meaning into the claim. In order to limit the claim, the preamble must be "essential to point out the invention defined by the claim." Kropa v. Robie . 88 USPQ 478, 481 (CCPA 1951) (discussed below). Inclaims directed to articles and apparatus, any phraseology in the preamble that limits the structure of that article or apparatus must be given weight. In re Stencel, 4 USPQ2d 1071 (Fed. Cir 1987) (discussed below). On the other hand, a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) (process claims, discussed below). Kropa v.Robie,88 USPQ 478.481 (CCPA 1951)(claims directed to apparatus, products, chemical structure, etc, as discussed below).

Application/Control Number: 09/825,664

Art Unit: 2829

4. Applicant's arguments filed on03/13/03 have been fully considered but they are not

persuasive.

It appears that Applicants failed to point out in the support for the limitations of claims

69-72,74-78 and 80 in the specification.

It is noted that intermediate member is configured to support the wafer and to electrically

connect the electrical coupling of the wafer with the electrical coupling of the chuck but not for

processing within the wafer processing apparatus to form a plurality of discrete integrated

circuits of a plurality of respective dies.

5. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to VINH P. NGUYEN whose telephone number is (703) 305-4914.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Group receptionist whose telephone number is (703) 305-4900.

VINH P. NGUYEN PRIMARY EXAMINER Page 5

ART UNIT 2829

05/29/03